



## School and Workshop on Highly Frustrated Magnets and Strongly Correlated Systems: From Non-Perturbative Approaches to Experiments

30 July - 17 August 2007

Miramare-Trieste, Italy

This programme is devoted to the investigation of new phases of matter emerging from strong quantum fluctuations in frustrated and/or low dimensional systems. The first part (July 30 - August 7) is a **Summer School on Highly Frustrated Magnets** introducing basic theoretical concepts and experimental tools as well as a few selected advanced topics (see programme below). The second part (August 8-17) is a **Workshop on Highly Frustrated Magnets and Strongly Correlated Systems** that will bring together specialists of one-dimensional systems and/or frustrated magnets, with emphasis on non-perturbative approaches in one dimension and on synthesis, experimental investigation, modelling and new concepts in frustrated magnetism.

### Programme of the Summer School

- \* Basic theoretical concepts and methods (**A. Auerbach, W. Brenig, J. Chalker, C. Lacroix, F. Mila, G. Misguich, A. Tsvelik, R. Valenti**)
- \* Basic experimental tools (**S. Bramwell, P. Carretta, J. Greedan, A. Keren, R. Kremer, P. Lemmens**)
- \* Numerical approaches (**A. Läuchli, S. Sorella**)
- \* Specific problems: kagome, pyrochlore, doping, phonons, orbital degeneracy (**M. Gingras, P. Mendels, R. Moessner, K. Penc, D. Poilblanc, M. Takigawa, O. Tchernyshyov, J. Van der Brink**)

### PARTICIPATION

Scientists from all countries, which are members of the UN, UNESCO or IAEA, may attend the Course. The main purpose of the Centre is to help researchers from developing countries, within a framework of international cooperation; however, scientists from developed countries are also welcome to attend. Since ICTP activities are conducted in English, participants should have an adequate working knowledge of this language.

As a rule, travel and subsistence expenses of participants should be borne by their home institution. However, limited funds are available for some participants who are nationals of, and working in, a developing country. **There is no registration fee.**

Interested participants should fill in and submit the [Online Application Form](http://agenda.ictp.it/smr.php?1855) that can be found at: <http://agenda.ictp.it/smr.php?1855> and attach a c.v. (for students a recommendation letter from their tutor is also requested). Kindly send all file attachments in Word or Acrobat format.

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Highly Frustrated Magnets and Strongly Correlated Systems**

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### LECTURERS (School)

See programme on left side

### INVITED SPEAKERS (Workshop)

**L. Balents** (Santa Barbara)

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\*t.b.c.

### DEADLINE

for requesting participation

**15 March 2007**